UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,567	10/06/2003	Steven S. Crooks	CRNI.100525	3116

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EXAMINER
MOLINA, ANITA C

ART UNIT	PAPER NUMBER
3626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 October 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) <u>11-19</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>03/04/2004, 04/13/2005</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1.   Applicant's election without traverse of claims 1-10 in the reply filed on

03/30/2010 is acknowledged.

2.   Applicant is reminded that upon the cancellation of claims to a non-elected

invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by

a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

1.   Claims 1-8 are rejected under 35 U.S.C. 101 based on Supreme Court

precedent, and recent Federal Circuit decisions, the Office's guidance to examiners is

that a § 101 process must (1) be tied to a particular machine or (2) transform underlying

subject matter (such as an article or materials) to a different state or thing. In re Bilsky,

88 U.S.P.Q.2d 1385 (Fed. Cir. 2008), Diamond v. Diehr, 450 U.S. 175, 184 (1981);

Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70

(1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

2.   An example of a method claim that would not qualify as a statutory process

would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory

process, the claim should positively recite the particular machine to which it is tied, for

example by identifying the apparatus that accomplishes the method steps, or positively

recite the subject matter that is being transformed, for example by identifying the

material that is being changed to a different state.

3.   Here, applicant's method steps, fail the first prong of the new Federal Circuit

decision since they are not tied to a particular machine and can be performed without

the use of a particular apparatus. Furthermore, the method steps fail to transform

underlying subject matter to a different state or thing. The mere manipulation and

presentation of data is not a transformation because data itself is not statutory subject

matter. Thus, claims 1-8 are non-statutory since they are not tied to a particular

machine and they do not transform underlying subject matter to a different state or

thing.

4.   Claim 10 is rejected under U.S.C. 101 because, in light of the specification, a

computer-readable medium may include carrier signals per se. Therefore, the invention

as claimed includes non-statutory subject matter (see: MPEP 2106, Section B).

Applicant is encouraged to limit the scope of the claim to computer-readable media that

are tangible or non-transitory.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 3-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US 7,155,427 to Prothia et al, hereinafter, Prothia in view of Lovis et

al, hereinafter, Lovis.

As per claim 1, Prothia teaches **a computer-implemented method for**

facilitating placement of health care order entry, comprising:

-**receiving input** indicative of a desired order **having terms therein** (see:

abstract);

-**normalizing the terms of the received input** (see: Appendix A, column 17-20);

-**finding possible** drug **matches for the normalized terms** (see: abstract), and

-**calculating a rough score for possible order matches** (see: column 2, lines

38-40);

-**refining the rough score with a rough score adjustment** (see: column 2,

lines 40-41); and

-**ranking the found possible order matches from the most-likely to match**

the desired order to the least-likely based upon the refined rough score (see:

column 2, lines 30-32).

Prothia does not teach receiving input **indicative of a desired order**, or finding

possible **drug** matches. Lovis teaches using a natural-language-based entry system for

entering orders in an electronic medical record interface. It would have been obvious to

one of ordinary skill in the art to include in the physician order entry system of Lovis, the

normalizing, scoring and refining or search terms as taught by Prothia because the

claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 3, Porthia teaches the computer-implemented method of claim 1, **wherein refining includes adding known synonyms to the terms in the possible drug matches** (see: column 8, lines 49-67) **and matching full sentence orders to the possible order matches** (see: column 10, lines 14-37).

As per claim 4, Prothia teaches the computer-implemented method of claim 3, **wherein refining further includes normalizing the full sentence orders** (see: column 10, lines 1-13)**, adjusting for exact matches and adjusting for unit matches** (see: Scoring table, columns 21-22, and column 12, lines 58—column 13, line 8).

As per claim 5, Prothia teaches the computer-implemented method of claim 1, **further comprising displaying the found possible order matches in the ranked order** (see: column 2, lines 30-32).

As per claim 6, Prothia teaches the computer-implemented method of claim 1, **wherein the rough score calculation includes determining a match distance and ranking the match based on the distance** (see: column 12, lines 35-67).

As per claim 7, Prothia teaches the computer-implemented method of claim 6, **wherein the distance is defined as the number of changes needed in the possible drug matches to obtain an exact match to the terms of the received input** (see: column 12, lines 35-67).

As per claim 9, a computer system having a processor, a memory and an operating environment, the computer system operable to execute the method as recited in claim 1, it is rejected for the same reasons set forth for claim 1.

As per claim 10, a computer-readable medium containing instructions for executing the method of claim 1, it is rejected for the same reasons set forth for claim 1.

6.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,155,427 to Prothia in view of Lovis as applied to claim 1 above, and further in view of US 2002/0165853 to Gogolak.

As per claim 2, Prothia teaches the computer-implemented method of claim 1, **wherein the normalizing comprises**:

-replacing any abbreviations with known terms corresponding to the respective abbreviations (see: Appendix A, WR-Names). Prothia fails to specifically teach **eliminating any terms that are numbers**. Gogolak teach normalizing terms, including removing numbers (see: paragraph 56). It would have been obvious to one of ordinary skill in the art to include in the physician order entry of Lovis and the normalizing of search terms of Prothia, the normalizing a term by removing the numbers as taught by Gogolak because the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

7.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US

7,155,427 to Prothia in view of US 2003/0074220 to Brandt as applied to claim 1 above,

and further in view of US 2003/0069880 to Harrison et al, hereinafter, Harrison.

As per claim 8, Prothia fails to specifically teach the computer-implemented

method of claim 1, **wherein normalizing includes setting an anti-flag for any found,**

pre-determined anti-terms, and wherein the rough score calculation includes

removing any terms for which the anti-flag is set. Harrison teaches a "NOT"

operator that eliminates records in a search result containing a specific word (see: at

least paragraphs 101-109). It would have been obvious to one of ordinary skill in the art

to include in the the physician order entry of Lovis and the normalizing of search terms

of Prothia, the NOT operator as taught by Harrison because the claimed invention is

merely a combination of old elements, and in the combination, each element merely

would have performed the same function as it did separately, and one of ordinary skill in

the art would have recognized that the results of the combination were predictable.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ANITA MOLINA whose telephone number is (571)270-

3614. The examiner can normally be reached on Monday through Friday 8am to

5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jerry O'Connor can be reached on 571-272-6787. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M./
Examiner, Art Unit 3626
05/22/2010

/Neal R Sereboff/
Examiner, Art Unit 3626